

PMA-233



NavMPS

# ***Navy Portable Flight Planning Software***

Mission Planning

# ***- N-PFPS -***



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# Agenda

- **Components**
- **Status / Schedule**
- **Hardware**
- **What's new in PFPS (N) 3.3 / 3.3.1**
- **Notes**



# ***N-PFPS***

## ***- Components -***





# N-PFPS v3.2 Components

(A Family of Mission Planning Products)

NavMPS

Mission Planning

## N-PFPS - Navy Portable Flight Planning Software

### ✓ - **CFPS - Combat Flight Planning Software**

- Tabular Flight Planner

### ✓ - **Falcon View**

- Graphical Flight Planner
  - NIMA Map and Imagery Products
  - Overlays

### ✓ - **TaskView**

- ATO Parser / Viewer

### ✗ - **(CWDS - Combat Weapon Delivery Software)**

### ✓ - **Flight Performance Modules (FPM's)**

- Goal - All DON Aircraft

### ✓ - **AWE - Aircraft Weapons Electronics**

- Cartridge Load

(PFPS = USAF release)





# ***N-PFPS v3.2 Components***

*(A Family of Mission Planning Products)*

**NavMPS**

**Mission Planning**

- ✓ – **CAPS - Combat Air Drop Planning Software**
- ✓ – **Air Refueling Tool**
- ✓ – **Close Air Support Tool**
- ✓ – **FIE - Flight Information Enhancement**
  - Navy Winder
  - NOTAMs
  - DD-175 / ICAO 1801
- ✓ – **BAM - Bird Avoidance Model**
  - Graphical depiction on Bird Migration Paths based on Historical Analysis.
- ✓ – **HOPS - Helicopter Operations Planning Software**
  - Provides the ability to calculate a load computation card (TOLD card)
- ✓ – **WinFPM Tool**
  - Provides access to all modes of Flight Performance Module
  - “Automated NATOPS”
- ✓ – **PFPS Update Utility**
  - Utility for management of PFPS data in a networked environment
- ✓ – **SkyView**
  - 3D Rendering of Point of Interest





# ***N-PFPS v3.2 Components***

*(A Family of Mission Planning Products)*

**NavMPS**

**Mission Planning**

## **NEW:**

- ✓ **- Handheld GPS A/W/E**
  - Upload points or routes to GPS handheld receivers
- ✓ **- GeoRect Tool**
  - Stand-alone tool to convert a bitmap, JPEG or TIFF file into a GeoTiff file
- ✓ **- WEZOT (Weapon Engagement Zone Overlay Tool)**
  - Objective area planning tool for helicopters





# ***N-PFPS***

## ***- Status / Schedule -***



# Status

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- **N-PFPS v3.2 (released 17 Oct 02)**
  - **IT-21**
    - PPL and SSIL approved
  - **NMCI**
    - Not yet Approved (Legacy) Product List (awaiting pop-in-the-box testing)
    - N-PFPS v3.1.2 only authorized version
- **CMDL v1.00.31 Beta**
  - **Supported:**  
**CH-46E, CH-53D/E, HH-60H, SH-60R, HH-1N, UH-1N, SH-2G, UH-3H, C-2A, C-130T, KC-130F/R/T and EA-6B**
  - **Not supported:**  
**F-14 B(U), S-3B (Series), T-45**
- **CMDL v1.2**
  - **add OFP load capability**
  - **Supported:**  
**P-3C (Only)**





# Status (cont.)

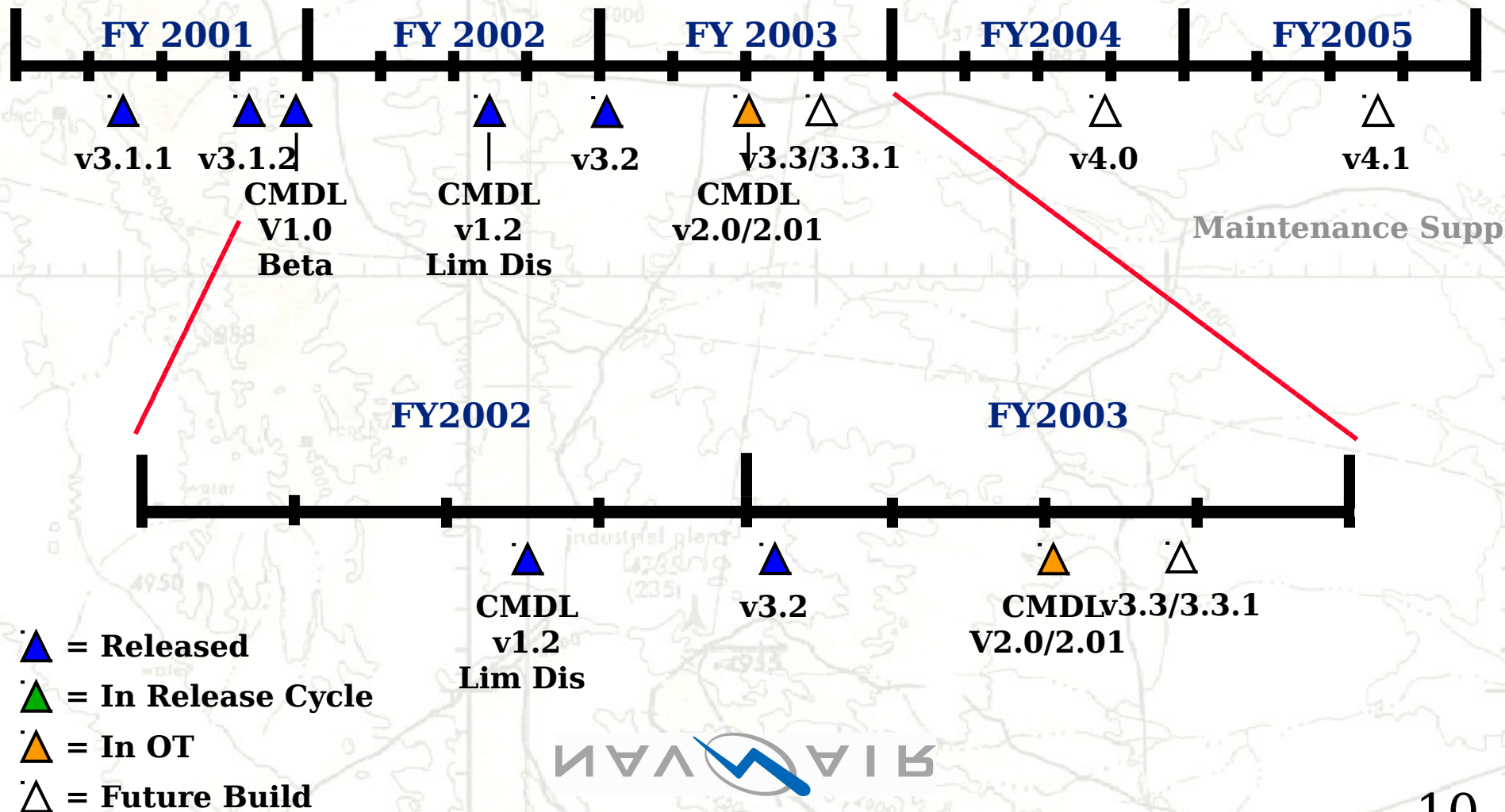
- **CMDL v2.0**
  - adds NPA and OFP load capability
  - Supported:  
**MH-53E (Only)**
- **CMDL v2.01**
  - adds NPA, OFP, PCMCIA load capability and DTM / PDTM (brick) zeroization from ground station
  - Supported:  
**All CDNU equipped aircraft**



# PFPS (N) Schedule

NavMPS

Mission Planning





# ***N-PFPS***

## ***- Hardware -***





# Hardware

- **FY01 Hardware (distributed)**
  - **Dell C800 Laptops - 230**
    - CVW (1), HMH (1), HMM (0), HML/A (1), VMMT (1), VMA (0), VMGR (0), VAQ (0), VMAQ (1), VFA (1), VMAF (0), VF (1), HSL (1) \* (60 S/R - 0), HS (1), HC (1), HCS (1), HM (1), VP (1), VQ (0), VS (1), VAW (1), VR (0), VRC (0)
  - **Micron Desktops - 130**
    - Weapons Schools, FRS, HML/A, VAW, VR, HSL, Training Wings, NAS
- **FY02 Hardware (in process)**
  - **Gateway 600 XP Laptops - 636 (512 fielded in Jan 03)**
    - HMH (3), HMM (3), HML/A (6), VMA (4), VMGR (6), VAQ (2), VMAQ (2), VFA (2), VMAF (3), VF (2), HSL (6) \* (60 S/R - 0), HS (2), HC (1), HCS (2), HM (1), VP (3), VQ (3), VS (2), VAW (1), VR (4), VRC (2)
    - Replacement for Dell 7000
  - **Micron Desktops - 194**
    - Weapons Schools, FRS, HSL, VMMT, Training Wings, MCAS, NAS
    - Replacement for FY 99 Micron



# ***PFPS (N)***

## ***- 3.3 / 3.3.1 -***



# ***PFPS (N) v3.3 / 3.3.1***

## ***Capabilities***

- **Illumination Planning**
- **Add “Roll Out on Course” Turn Type**
- **Turn Short Modifications (plan to turn apex)**
- **Add New Orbit Type “Gunship Orbit”**
- **User Defined Route Segments/Aerial Refuel Tracks**
- **Acceleration / Deceleration Calculations**
- **Multiple Rotary Wing Delays**
- **Sectional Support (NACO/FAA Provided GeoTiff)**
- **Tactical Graphics Overlay**
- **Intervisibility Tool**
- **Contour Line Overlay**
- **Drawing File Group, Cut and Edit**
- **Tabular Threat File Editing**
- **Threat Display Filtering**
- **NIMA City Graphics**
- **NIMA DTED Level II**
- **Favorites Enhancements**







# ***Petting Zoo***

## ***Classes***



# Expeditionary Operations Mission Planning



This afternoon - 1700 Crown Plaza Conf Room



PMA-233



NavMPS

# ***Portable Flight Planning Software (N)***

Mission Planning

# ***- PFPS (N) -***

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# ***N-PFPS***

## ***- FPM's -***



# ***FPM Development Status***

## **Flight Performance Modules**

(FPMs)

### **Certified**

AH-1W  
AV-8B (406)  
AV-8B (408)  
TAV-8B  
C-2A  
C-130T  
CH-46E

CH-53D  
CH-53E  
E-2C (427)  
EA-6B  
F/A-18A/B/C/D (400)  
F/A-18C/D (402)  
F/A-18E/F

F-14B/D  
HH-60H  
KC-130F/R/T  
MH-53E (416)  
MH-53E (418)  
MH-60S  
P-3C

S-3B  
SH-60B  
SH-60F  
T-45A/C  
UH-1N

### **In Development**

MH-60R

### **Next**

VH-3D  
VH-60N  
F/A-18E/F (Update)

### **Remaining**

MV-22B  
E-2C (425)  
E-6B  
EP-3E

AH-1Z  
UH-1Y





# ***Previous FPM OAG Priority***

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## **1999 OAG Priority**

- **Increased FPM Production and Faster FPM Certification**

## **2000 OAG Priority**

8. **FPM Re-validation and Maintenance and Faster FPM Certification**

## **2001 OAG Priority**

- o **Not Listed**

## **2002 OAG Priority**

- o **Not Listed**

**N78 Letter to Platform Program Offices  
(2001)**





# ***FPM's***

## **2003 OAG Priority**

- **???????**



# ***PFPS v3.2 Capabilities***

- **Route Rehearsal**
- **Zoom Tool**
- **GPS Range and Bearing Tool, Comments**
- **Coast Tracks**
- **Slowdown-by-Distance Point Editing**
- **Vertical Obstruction Display**
- **Vector Smart Map Display**
- **Route Corridors**
- **Enhanced Map Projection Support**
- **Enhanced No-Fly Area Support (text entry drawing editor)**
- **CAPS Validated and Unit Drop Zones and Landing Zones with Minimize Drop Zone Scale Distortion**
- **Airways Overlay Display Enhancement**





# ***PFPS v3.2 Capabilities***

- **TDIMF over TCP/IP (JTT) Intel Feed**
- **Vertical Route Profile Tool**
- **Ground and Maritime Route editing toolbar**
- **Shape File Support**
- **User Interface Enhancements (map planning)**
- **Airdrop Formation Planning**
- **Ground/Maritime Support**
- **Air Refueling Tool Enhancements**
- **Configurable Menus/Toolbar**
- **Additional/Updated TOLD Support**
- **NIMA CD Library Printing**
- **Geo-TIFF Support, User created GeoTIFF tool (GeoRect)**
- **Favorites Menu**
- **Mil Std-2525 Threat icons**





# ***N - P F P S***

## ***- Data Loading -***



# CMDL v1.0 Beta Release

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## Authorized Beta CMDL v1.0 Users

\* Per Release Msg - CNO 161808Z August 01

### Rotary Wing:

- CH-46E
- SH-60F
- HH-1N
- UH-3H
- CH-53D / E
- HH-60H
- UH-1N

### Fixed Wing:

- C-2A
- EA-6B
- KC-130F / R / T
- C-130T

## NOT Authorized to Use Beta CMDL v1.0

\* Per Release Msg - CNO 161808Z August 01

- F-14B(U)
- P-3 (Series)
- S-3
- T-45







# ***CMDL Data Load***

- **CMDL v1.00.31:**
  - **Flight Plans**
    - 12 plans up to 50 points each
  - **Primary Library**
    - Data Base - Up to 20,004 points
    - DAFIF & Local Points
  - **Reversionary Library**
    - Data Base - Up to 200 points
    - DAFIF & Local Points
  - **GPS Almanac**
  - **Magnetic Variation Coefficients**
- **CMDL v2.0 adds:**
  - **NPA - Non-Precision Approaches**
    - MH-53E





# ***CMDL v1.0 Status***

- **CMDL v1.0 (Beta)**
  - **Certification**
    - ✓ Testing completed 10 Dec 00
    - ✓ PMW/PMA-156 Certification Letter
  - **Additional paperwork**
    - Aircraft PMA Release Concurrence (NOTAL)
  - **Release Message**
    - ✓ CNO 161808Z August 01
  - **Distribution**
    - ✓ Distributed 20 Sep 01



# CMDL v2.0 Status

- **CMDL v2.0/2.01**
  - **Introduction of GPS Non-Precision Approach (NPA) into DON aircraft**
    - **MH-53 first DON platform to be approved for NPA's**
    - **Coordinated PMA-261, PMW/A-156 and PMA-233 effort**
    - **Development:**
      - **Complete**
    - **Testing:**
      - **PMW/A-156 Certification Test**
        - **Originally completed 18 May 01**
        - **New Certification Testing (additional NPA data required for OFP)**
      - **CMDL v2.0 provided for use during MH-53 DT**
      - **CMDL v2.0 will support MH-53 OT**
  - **CMDL v2.0/2.01 distribution plan**







# Data Loaders

- **Goal**
  - **2 per squadron (minimum)**
- **Packaging (Scsi-MID)**
  - **Rack mount (TAMPS Stations)**
  - **External enclosure ("lunchbox")**
- **Procurement**
  - **MID:**
    - **Used by AH-1W, HH/UH-1N, CH-46E, CH-53D/E, HH/SH-60F/H, C-2A, T-45, P-3, S-3, C/KC-130F/R/T, EA-6B, F-14 (partial), FA-18 (limited)**
  - **DSUR:**
    - **Used by FA-18, AV-8B, F-14 (partial)**

Scsi-MID

319

Micro-MID

350

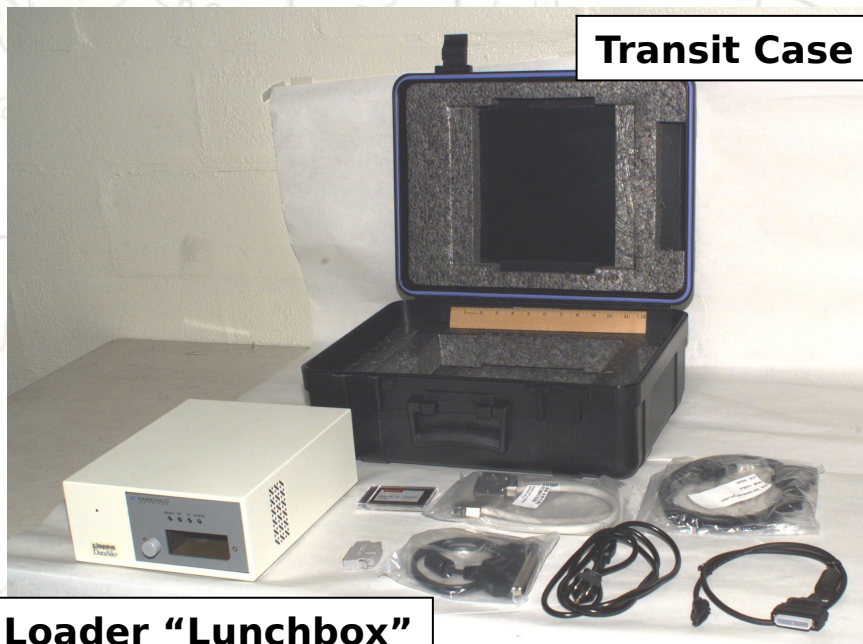


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# SCSI-MID / MicroMID





# Printed Products

- **Printer**
  - **11" x 17"**
  - **Laser Color / Ink Jet Color**
  - **Consumables**
  - **Cost**
- **Plotter**
  - **3' x 4' or greater**
  - **Consumables**
  - **Cost**





# Questions

- ***FAQ's?***
- ***SAQ's?***
- ***NBAQ's?***